

REPLY

Serial No. 09/808,558  
Atty. Docket No. GP068-05.CN3

**Remarks**

Claims 422-429, 431-433, 440-448, 450-452, 459 and 461-479 are presently pending in the subject application. Claims 441-448, 450-452, 459, 461-463 and 465 are withdrawn.

Reconsideration and allowance are respectfully requested in view of the above amendments and the following remarks.

Claims 430, 434-439, 449, 453-458 and 460 are canceled herein without prejudice to the prosecution of the subject matter of these claims in this or a future continuing application.

Claim 422 has been amended to recite a hybridization assay probe having a detectable label. *See, e.g.*, specification at page 19, line 21, through page 20, line 7. Claim 422 has been further amended to indicate that the claimed probe forms a stable, double-stranded hybrid with the nucleic acid analyte. *See, e.g.*, specification at page 19, line 21 *et seq.*, and *passim*.

Claims 423-429, 431-433, 440, 441, 445-448, 450 and 464 all depend, directly or indirectly, from claim 422 and have been amended to reflect the amendments to claim 422.

Claim 466-479 are newly added herein.

New probe claim 466 and new method claim 473 depend from claims 422 and 441, respectively, and recite that the hybrid formed between the first and second base regions is more stable than a hybrid formed between unmodified forms of the first and second base regions. Prior to the amendments herein, the limitation of claims 466 and 473 appeared in claims 422 and 441.

New probe claims 467-472 depend from claims 466, 423-426 and 429, respectively, and recite that the 2'-O-alkyl substitution to the ribofuranosyl moiety is a 2'-O-methyl substitution. New method claims 474-479 depend from claims 473, 442-445 and 448, respectively, and also recite that the 2'-O-alkyl substitution to the ribofuranosyl moiety is a 2'-O-methyl substitution. Prior to the amendments herein, this limitation only appeared in dependent claims 440 and 463.

**Information Disclosure Statements**

Applicants have no record that the Examiner has considered the references provided with their Information Disclosure Statements dated August 3, 2001 and September 3, 2003.

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Accordingly, Applicants respectfully request that the Examiner indicate consideration of these references by initialing the attached copies of Form PTO-1449 and Form PTO/SB/08 that were originally filed with these Information Disclosure Statements. *See* Attachments A and B.

### **Rejoinder of the Process Claims**

The claims elected for examination in the instant application are all directed to a product (*i.e.*, a hybridization assay probe). Therefore, should the Examiner find claim 422, the only independent claim currently being examined, to be allowable, then Applicants respectfully request rejoinder of the process claims, which all depend from claim 422. *See* MPEP § 821.04.

### **Rejections Under 35 U.S.C. § 102**

Claims 422, 424, 426, 429 and 440 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Lubini *et al.*, *Current Biology*, 1(1):39-45 (1994). Applicants submit that this rejection is overcome by the language of amended claim 422, which incorporates the limitation of canceled claim 430 (*i.e.*, a detectable label). Accordingly, withdrawal of this rejection is respectfully requested.

Claims 422-440 and 464 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Kool *et al.*, U.S. Patent No. 5,514,546. Applicants submit that this rejection is overcome by the language of amended claim 422, which requires that the claimed hybridization assay probe form a double-stranded hybrid with the nucleic acid analyte. Kool, on the other hand, discloses a stem-loop oligonucleotide having a loop domain comprised of a parallel binding (P) domain and an anti-parallel binding (AP) domain. The P and AP domains of Kool's stem-loop oligonucleotides both bind to one strand of a nucleic acid target -- the P domain in a parallel manner and the AP domain in an anti-parallel manner -- to form a detectable triplex. *See* Abstract and Figure 1 of Kool. Moreover, Applicants submit that references to the use of 2'-O-methyl ribose in Kool are to their use

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in the P and AP domains (as opposed to the double-stranded stem domain) to improve binding stability with the nucleic acid target. *See, e.g.,* Kool at col. 19, line 20 *et seq.* Accordingly, withdrawal of this rejection is respectfully requested.

### Conclusion

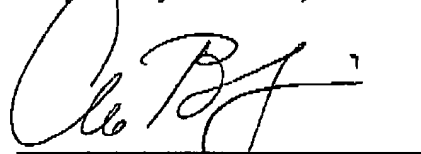
In view of the above amendments and remarks, Applicants submit that the subject application is in condition for allowance and early Notice to that effect is respectfully requested.

Please charge any fees due in connection with this Reply, including the two-month extension of time fee, to Deposit Account No. 07-0835 in the name of Gen-Probe Incorporated.

### Certificate of Transmission

I hereby certify that this correspondence (and any referred to as attached or enclosed) is being sent by facsimile to 703-872-9306 on the date indicated below to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Respectfully submitted,



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